

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An electrophoretic display panel—(1), comprising:

[[-]] an electrophoretic medium (5)—comprising charged particles (6);

[[-]] a plurality of picture elements—(2);

[[-]] electrodes (3,4)—associated with each picture element (2)—for receiving a potential difference; and

[[-]] drive means—(100), the drive means (100)—being arranged for controlling the potential difference of each picture element—(2),

[[-]] to be a grey scale potential difference for enabling the particles (6) ~~to occupy the~~ to be driven to a position corresponding to the image information from a preceding optical state,

wherein the drive means (100)—are further arranged for application of the grey scale potential difference for at least a

subset of all drive waveforms for setting a picture element from a preceding optical state to a grey scale in two or more pulses which change the optical state of the system separated by a non-zero time interval and are arranged for prior to application of the grey scale potential difference, driving a reset potential difference of each picture element to drive the particles to occupy an extreme position which is determined based on which extreme position is closest to a position of the particles which corresponds to the image information.

2. (Currently amended) ~~An~~ The electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for, during the non-zero time interval, applying a voltage value below a threshold voltage value below which the ~~particle(s)~~ particles remain substantially in their position.

3. (Currently amended) ~~An~~ The electrophoretic display panel as claimed in claim 1, ~~where~~ wherein the drive means are arranged for, during the non-zero time interval, applying a voltage value of substantially zero.

4. (Currently amended) ~~An~~The electrophoretic display panel ~~(1)~~ as claimed in claim 1, wherein the drive means ~~(100)~~ are arranged for controlling the potential difference of each picture element ~~(2)~~ to be a reset potential difference having a reset value and a reset duration for enabling particles ~~(6)~~ to substantially occupy one of the extreme optical positions.

5. (Currently amended) ~~An~~The electrophoretic display panel as claimed in claim 1, wherein the drive means are further arranged for application of the grey scale potential difference over more than two pulses.

6. (Currently amended) ~~An~~The electrophoretic display panel as claimed in claim 1, wherein the drive means ~~(100)~~ are further arranged for application of the grey scale potential difference in two pulses.

7. (Currently amended) ~~An~~The electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for application of the grey scale potential difference in two or more pulses wherein the applied pulses have decreasing time duration as

the driving time increases.

8. (Currently amended) ~~An~~The electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for application of the grey scale potential difference in two or more pulses wherein the applied pulses have decreasing amplitude as the driving time increases.

9. (Currently amended) ~~An~~The electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for application of the grey scale potential difference in more than two pulses, the pulses are separated by at least two non-zero time intervals, and the time intervals increase as the driving time increases.

10. (Currently amended) ~~An~~The electrophoretic display panel as claimed in claim 1, wherein the drive means are further arranged to control for each picture element the potential difference to be a sequence of preset potential differences before being the grey scale potential difference, the sequence of preset potential differences having preset values and associated preset durations,

the preset values in the sequence alternating in sign, each preset potential difference representing a preset energy sufficient to release particles present in one of said extreme positions from their position but insufficient to enable said particles to reach the other one of the extreme positions.

11. (Currently amended) A method for driving an electrophoretic display device comprising:

[[-]] an electrophoretic medium ~~(5)~~ comprising charged particles ~~(6)~~;

[[-]] a plurality of picture elements ~~(2)~~, ~~in which the~~
method comprising acts of:

applying grey scale potential differences for setting a picture element to an optical state from a preceding optical state
~~are applied for~~ at least a subset of all drive waveforms in two or more pulses separated by a non-zero time interval; and

prior to application of the grey scale potential difference,
applying a reset potential difference of each picture element to drive the particles to occupy an extreme position which is determined based on which extreme position is closest to a position of the particles which corresponds to the optical state.

12. (Canceled)

13. (Currently amended) A—The method as claimed in claim 11, wherein the act of applying the grey scale potential difference for setting a picture element to an optical state from a preceding optical state is applied in more than two pulses.

14. (Currently amended) A—The method as claimed in claim 11, wherein the act of applying the grey scale potential difference for setting a picture element to an optical state from a preceding optical state is applied in two pulses.

15. (Currently amended) A—The method as claimed in claim 11, wherein the time periods between the grey scale pulses increase with increasing drive time.

16. (Currently amended) A—The method as claimed in claim 11, wherein the pulse length of the grey scale pulse decreases with increasing drive time.

17. (Currently amended) ~~Computer~~—A computer program comprising program code means—~~for performing a method in accordance with a~~the method as claimed in claim 11 when said program is ~~run~~executed on a computer.

18. (Currently amended) ~~Computer~~—A computer program product comprising program code means—~~stored on a computer readable medium for performing a~~the method as claimed in claim 11 when said program is ~~run~~executed on a computer.

19. (Canceled)

20. (Currently amended) Drive means ~~(100)~~—for driving an electrophoretic display panel—~~(1)~~, said display panel—~~(1)~~, comprising:

[[-]] an electrophoretic medium ~~(5)~~—comprising charged particles—~~(6)~~;

[[-]] a plurality of picture elements—~~(2)~~;

[[-]] electrodes ~~(3,4)~~—associated with each picture element ~~(2)~~—for receiving a potential difference;

said drive means ~~(100)~~—being arranged for controlling the potential

difference of each picture element ~~(2)~~ to be a grey scale potential difference for enabling the particles ~~(6)~~ to occupy the position corresponding to the image information,

said drive means ~~(100)~~ being further arranged for application of the grey scale potential difference for at least a subset of all drive waveforms for setting a picture element from a preceding optical state to a grey scale in two or more pulses which change the optical state of the system separated by a non-zero time interval and are arranged for prior to application of the grey scale potential difference, driving a reset potential difference of each picture element to drive the particles to occupy an extreme position which is determined based on which extreme position is closest to a position of the particles which corresponds to the grey scale.

21. (New) The electrophoretic display panel as claimed in claim 1, comprising a plurality of additional capacitors, at least one additional capacitor being connected to each picture element and to one or more storage capacitor lines.

22. (New) The drive means as claimed in claim 20, comprising a

plurality of additional capacitors, at least one additional capacitor being connected to each picture element and to one or more storage capacitor lines.